.;

FORM PTO-1390 (REV. 10-2003) ATTORNEY'S DOCKET NUMBER TRANSMITTAL LETTER TO THE UNITED STATES U.S. APPLICATION NO. (If known, see 37 CFR 1.5 DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371 PRIORITY DATE CLAIMED INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PCT/DE03/00515 19 February 2003 19 February 2002 TITLE OF INVENTION **ELECTROMAGNETIC VALVE** APPLICANT(S) FOR DO/EO/US HUBERT OTT and THOMAS GRAU Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: 1. X This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. X This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). 5. A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). 6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). 7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. 8. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)). 9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 11. 🗌 An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 12. 13. A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. 14. 🔲

15. X A substitute specification. 16. A power of attorney and/or change of address letter. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825. 17.

A second copy of the published international application under 35 U.S.C. 154(d)(4). 18.

A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 19.

20. Other items or information:

U.S. APPLICATION NO NET IN	575359	NTERNATIONAL APPLICATION NO.			ATTOMORETS DO	CKET RUMBER
21 🕅 The follow	ving fees are submitted:			CALC	ULATIONS	PTO USE ONLY
	L FEE (37 CFR 1.492 (a)					
Neither international preliminary examination fee (37 CFR 1.482)						
nor international s and International S	earch fee (37 CFR 1.445) Search Report not prepare	(a)(2)) paid to USPTO ed by the EPO or JPO	\$1080.00	1		
International prelin USPTO but Intern	minary examination fee (ational Search Report pr	37 CFR 1.482) not paid to epared by the EPO or JPC	\$920.00			
International prelim but international se	minary examination fee (earch fee (37 CFR 1.445)	37 CFR 1.482) not paid to (a)(2)) paid to USPTO	USPTO \$770.00	† 		
International prelimental but all claims did r	ninary examination fee (not satisfy provisions of I	37 CFR 1.482) paid to US PCT Article 33(1)-(4)	SPTO \$730.00			
International prelir	ninary examination fee (37 CFR 1.482) paid to US	SPTO S100.00			
and all claims satis	ified provisions of PCT A	Article 33(1)-(4) BASIC FEE AMO	\$100.00 ·	\$ 9	0.0. 00	
				9.	20.00	
Surcharge of \$130.0 from the earliest cla	0 for furnishing the oath imed priority date (37 Cl	or declaration later than 3 FR 1.492(e)).	30 months	\$	·	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$		
Total claims	20 - 20 =	0	x \$18.00	\$	0	
Independent claims	3 -3 =	0	x \$86.00	\$	0	
MULTIPLE DEPEN	DENT CLAIM(S) (if app		+ \$290.00		90.00	
	TOTAL (OF ABOVE CALCU	LATIONS =	\$1.2	10.00	
Applicant claim are reduced by	ns small entity status. Se 1/2.	e 37 CFR 1.27. The fees	indicated above	\$		
			JBTOTAL =	\$1,2	10.00	
Processing fee of \$1 from the earliest cla	30.00 for furnishing the imed priority date (37 CF	English translation later the R 1.492(f)).		\$		
		TOTAL NATIO	NAL FEE =	\$1,2	10.00	
Fee for recording the accompanied by an	e enclosed assignment (3 appropriate cover sheet (7 CFR 1.21(h)). The assi 37 CFR 3.28, 3.31). \$40.	gnment must be 00 per property +	\$		
		TOTAL FEES E	NCLOSED =	\$1,2	10.00	
					nt to be funded:	\$
				cl	harged:	\$
b. Please char A duplicate c. The Commoverpayme	escopy of this sheet is encuissioner is hereby author int to Deposit Account No.	No in	nal fees which may bate copy of this sheet	e require	ed, or credit a sed. e public. Cr	any edit card
NOTE: Where an or (b)) must be file	appropriate time limit d and granted to restor	under 37 CFR 1.495 has e the application to pend	not been met, a pet ling status.	ition to I	revive (37 C	FR 1.137 (a)
SEND ALL CORRESPO			<u> </u>	<u>سندن</u>	(Z)	Laneman
	. Breneman, Esq		SIGNATU	RE		
	& GEORGES		Willi	am D.	Brenema	n Esa
	onwealth Avenue		NAME			- <u> </u>
	a, Virginia 223	03		26,	714	
•	3) 683-8006		REGISTR	ATION NU	JMBER	
rax: (/U	3) 683–8009					

DTOS REC'S PCT/PTO 19 AUG/PRUC

PTO/SB/17 (10-03)

Approved for use through 07/31/2008. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE	TR	AN	SMI	TTAL
1	for	FY	200	4

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$) 1,210.00

Complete if Known				
Application Number	10/505357			
Filing Date	August 19, 2004			
First Named Inventor	OTT, Hubert and GRAU, Thoma			
Examiner Name				
Art Unit				
Attorney Docket No.				

Telephone 703 683-8006

August 19,

Check Credit card Money Other None Order Other Order	METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)			
Deposit Account:		3. ADDITIONAL FEES			
Doposit					
Number Deposit Account Name William D. Breneman, Esq.	Deposit 02-3702				
RENEMAN & CEORGES The Director is authorized to: (check all that apply) 1053 130 1053	Number	1051 130 205	1 65 Surcharge - late filing fee or oath		
The Director is authorized to: (chock all that apply) Charge fee(s) indicated below Credit any overpayments Credit any overpayment of fee(s) 1804 920* 1804 920* 1804 920* 1804 920* 1804 920* 1805 1804 920* 1805 1804 920* 1805 1806 1805 1806	Account PDEMEMAN C CEODOEC	1052 50 205			
Charge fee(s) indicated below	Name — — — — — — — — — — — — — — — — — — —	1053 130 105	3 130 Non-English specification		
Charge any additional fee(s) or any underpayment of fee(s) Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account. FEE CALCULATION 1. BASIC FILING FEE Large Entity Small Entity Fee Fee Fee Fee Fee Fee Paid 1001 770 2001 385 Utility filing fee 1004 770 2004 385 Reissue filing fee 1004 770 2004 385 Reissue filing fee 1005 160 2005 80 Provisional filing fee 1005 160 2005 80 Provisional filing fee 1006 160 2005 80 Provisional filing fee 1007 Total Claims 1008 1009 1009 1009 1009 1009 1009 1009		1812 2,520 1812	2 2,520 For filing a request for ex parte reexamination		
Charge fee(s) indicated below, except for the filling fee to the above-identified deposi account. 1. BASIC FILING FEE Large Entity Small Entity Fee Paid 1251 110 1251 155 156		1804 920* 180			
1. BASIC FILING FEE 1/25		1805 1,840* 180	5 1,840° Requesting publication of SIR after		
1. BASIC FILING FEE Large Entity Small Entity Fee Pea Fe		1251 110 225			
Large Entity Small Entity Small Entity Fee F		1252 420 225	2 210 Extension for reply within second month		
1254 1,480 1255 1,005 Extension for reply within fourth month 1255 2,010 1255 1,005 Extension for reply within fourth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fourth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 2,010 1255 1,005 Extension for reply within fifth month 1255 1255 1,005 Extension for reply within fifth month 1255 1255 1,005 1		1253 950 225	3 475 Extension for reply within third month		
1001 770 2001 385	Fee Fee Fee Fee Description Fee Paid	1254 1,480 225	54 740 Extension for reply within fourth month		
1002 340 2002 170 Design filing fee		1255 2,010 225	55 1,005 Extension for reply within fifth month		
1003 530 2003 265 Plant filling fee 1402 330 2402 165 Filling a brief in support of an appeal 1403 290 2403 145 Request for oral hearing 1403 2403 2403 2403 2403 2403 2403 2403 2			01 165 Notice of Appeal		
1004 770 2004 385 Reissue filing fee		1402 330 240	• • • • • • • • • • • • • • • • • • • •		
SUBTOTAL (1) \$\(\frac{1}{2}\)\$ 1.510 Petition to institute a public use proceeding 2452 55 Petition to revive - unavoidable 2452 55 Petition to revive - unavoidable 2452 55 Petition to revive - unavoidable 2453 1,330 665 Petition to revive - unintentional 2501 665 Utility issue fee (or reissue) 2502 40 Design issue fee 1503 640 130 Petitions to the Commissioner 1807 50 Processing fee under 37 CFR 1.17(q) 1807 50 Processing fee under 37 CFR 1.17(q) 1807 50 Processing fee under 37 CFR 1.17(q) 1808 180 180 Submission of Information Disclosure Stmt 8021 40 Recording each patent assignment per property (times number of properties) 1809 770 2809 385 Filing a submission after final rejection (37 CFR 1.129(a)) 2809 385 For each additional invention to be examined (37 CFR 1.129(b)) 2801 385 Request for Continued Examination (RCE) 2801 3801 3801 3801 3801 3801 3801 3801 3		1403 290 240			
SUBTOTAL (1) (\$) 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Fee from below Fee Paid 1501 1,330 2501 665 Utility issue fee (or reissue) Extra Claims		1451 1,510 145	1 1,510 Petition to institute a public use proceeding		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Fee from Total Claims Independent Claims Multiple Dependent Fee Fee Fee Fee Fee Fee Code (\$) 1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claims over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent SUBTOTAL (2) 1453 1,330 2453 665 Petition to revive - unintentional 1501 1,330 2501 665 Utility issue fee (or reissue) 1502 480 2502 240 Design issue fee 1503 640 2503 320 Plant issue fee 1503 640 2503 320 Plant issue fee 1503 640 2503 320 Plant issue fee 1504 860 180 180 180 180 Submission of Information Disclosure Stmt 1807 50 1807 50 Processing fee under 37 CFR 1.17(q) 1806 180 1806 180 Submission of Information Disclosure Stmt 1809 770 2809 385 Filing a submission after final rejection (37 CFR 1.129(a)) 1809 770 2810 385 For each additional invention to be examined (37 CFR 1.129(b)) 1801 770 2801 385 Request for Continued Examination 1801 770 2801 385 Request for Continued Examination 1802 900 Request for expedited examination 1803 900 Request for expedited examination 1804 900 Request for expedited examination 1805 900 Request for expedited examination 1806 180 180 180 180 180 Submission of Information Disclosure Stmt 1809 770 2809 385 Filing a submission after final rejection 1807 770 2801 385 Request for Continued Examination 1807 0 1802 900 Request for expedited examination 1807 0 1802 900 Request for		1452 110 245	52 55 Petition to revive - unavoidable		
Total Claims		1453 1,330 245	3 665 Petition to revive - unintentional		
Total Claims		1501 1,330 250	11 665 Utility issue fee (or reissue)		
Independent Claims Multiple Dependent Large Entity Small Entity Fee Fee Fee Code (\$) 1807 50	Extra Claims below Fee Paid	1502 480 250	02 240 Design issue fee		
Claims Multiple Dependent Large Entity Small Entity Fee Fee Fee Code (\$) 1202 18 2202 9 Claims in excess of 20 1203 290 2203 145 Multiple dependent claims in excess of 3 1204 86 2204 43 "Reissue independent claims over original patent over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent SUBTOTAL (2) \$1 1460 130 1460 130 Petitions to the Commissioner 1807 50 Processing fee under 37 CFR 1.17(q) 1806 180 Submission of Information Disclosure Stmt 1806 180 Submission of Information Disclosure Stmt 1809 770 2809 385 Filing a submission after final rejection (37 CFR 1.129(a)) 1810 770 2801 385 For each additional invention to be examined (37 CFR 1.129(b)) 1801 770 2801 385 Request for Continued Examination (RCE) 1802 900 1802 900 Request for expedited examination of a design application 1807 50 Processing fee under 37 CFR 1.17(q) 1806 180 Submission of Information Disclosure Stmt 8021 40 8021 40 8021 40 Recording each patent assignment per property (times number of properties) 1809 770 2809 385 Filing a submission after final rejection (37 CFR 1.129(a)) 1810 770 2810 385 For each additional invention to be examined (37 CFR 1.129(b)) 1801 770 2801 385 Request for Continued Examination (RCE) 1802 900 1802 900 Request for expedited examination of a design application 1807 50 Processing fee under 37 CFR 1.17(q) 1806 180 1806 180 Submission of Information Disclosure Stmt 1807 70 2809 385 Filing a submission after final rejection (37 CFR 1.129(a)) 1809 770 2801 385 For each additional invention to be examined (37 CFR 1.129(b)) 1800 970 2809 385 Filing Sequest for expedited examination of a design application 1801 770 2801 385 Request for Continued Examination (37 CFR 1.129(b)) 1801 770 2801 385 Request for Continued Examination (37 CFR 1.129(b)) 1802 900 1802 900 Request for expedited examination of a design application 1801 770 2801 385 Request for Examination (37 CFR 1.129(b))		1503 640 250	03 320 Plant issue fee		
Large Entity Small Entity Small Entity Fee	Claims - 3" =	1460 130 146	60 130 Petitions to the Commissioner		
Fee Fee Code (\$) 1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claims in ot paid 1204 86 2204 43 "Reissue independent claims over original patent over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 (\$) SUBTOTAL (2) Fee Pee Fee Code (\$) Fee Description 8021 40 Recording each patent assignment per property (times number of properties) 1809 770 2809 385 Filing a submission after final rejection (37 CFR 1.129(a)) 1810 770 2810 385 For each additional invention to be examined (37 CFR 1.129(b)) 1801 770 2801 385 Request for Continued Examination (RCE) 1802 900 1802 900 Request for expedited examination of a design application 1803 1805 Total Call Call Call Call Call Call Call C	Multiple Dependent	1807 50 18	107 50 Processing fee under 37 CFR 1.17(q)		
Code (\$) Code (1806 180 18			
1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claims over original patent 1204 86 2204 43 "Reissue independent claims over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent SUBTOTAL (2) (\$) 1809 770 2809 385 Filing a submission after final rejection (37 CFR 1.129(a)) 1810 770 2810 385 For each additional invention to be examined (37 CFR 1.129(b)) 1802 900 1802 900 Request for Continued Examination of a design application National Phase Application Other fee (specifyFee (see attached form) Reduced by Basic Filing Fee Paid Suprocal (3) (5) 1 210 00		8021 40 80	40 Recording each patent assignment per		
1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claim, if not paid 1204 86 2204 43 "Reissue independent claims over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 1802 900 Request for expedited examination 1205 1802 900 Request for	1202 18 2202 9 Claims in excess of 20	1809 770 28			
1204 86 2204 43 "Reissue independent claims over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent 1205 1802 900 Request for expedited examination of a design application 1205 1205 1205 1205 1205 1205 1205 1205	·	20			
1204 86 2204 43 Reissue independent dalins over original patent 1801 770 2801 385 Request for Continued Examination (RCE) 1205 18 2205 9 Reissue claims in excess of 20 and over original patent 1802 900 1802 900 Request for expedited examination of a design application National Phase Application Other fee (specifyFee (see attached form) Reduced by Basic Filing Fee Paid Support (2) (5) 1 210 00		1810 770 28			
and over original patent National Phase Application SUBTOTAL (2) (\$) Other fee (specifyFee (see attached form) Reduced by Basic Filing Fee Paid SUBTOTAL (2) (\$) 1 210 00		1801 770 280			
SUBTOTAL (2) (5) Reduced by Basic Filing Fee Paid SUBTOTAL (2) (5) 1 210 00			2 900 Request for expedited examination of a design application		
SUBTOTAL (2) (5) Reduced by Basic Filing Fee Paid SUBTOTAL (2) (5) 1 210 00		Other fee (specify)	National Phase Application		
or municial proviously paid, if greater, i'vi noissuos, see above	SUBTOTAL (2) (5) Reduced by Basic Filing Fee Paid SUBTOTAL (2) (5) 1 210 00				
SUBMITTED BY (Complete (if applicable))					

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Registration No.

26,714

Esq.

William D. Breneman.

Name (Print/Type)

Signature